

FIG. 1

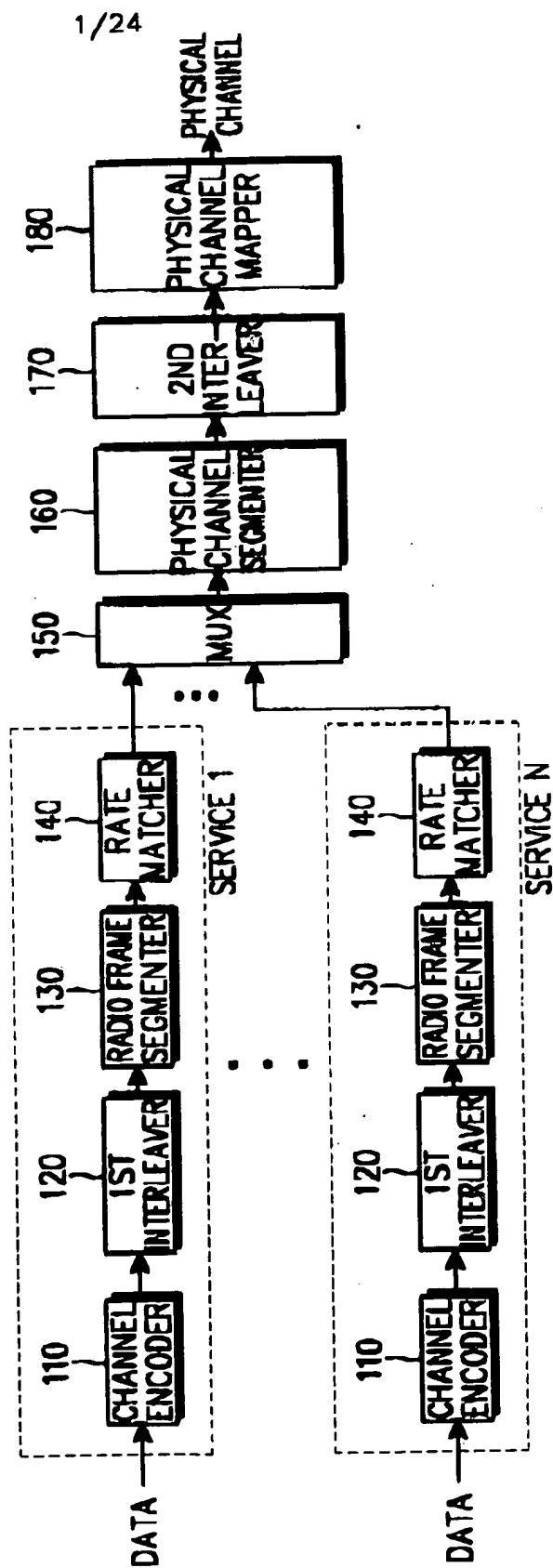
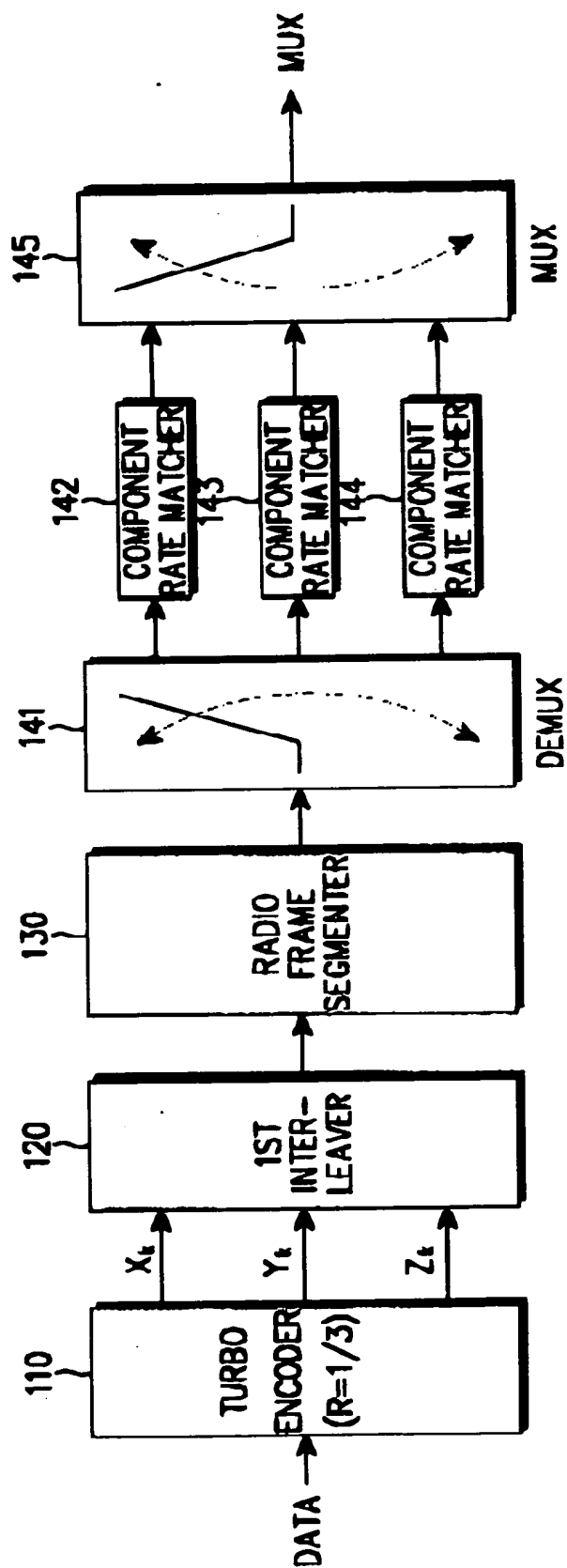


FIG. 2



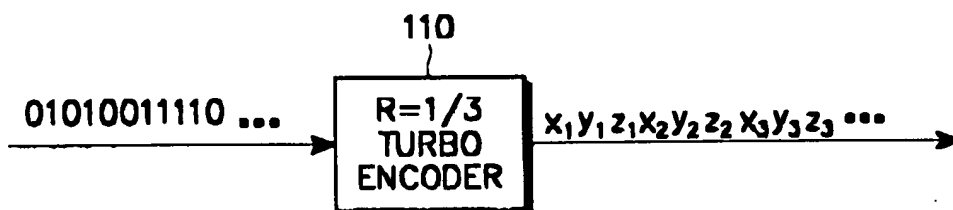


FIG. 3

1st INTERLEAVER INPUT(CODE RATE R=1/3)

| | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 |
| 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 |
| 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 |
| 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 |
| 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 |
| 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 |
| 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 |
| 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 |
| 97 | 98 | 99 | 100 | 101 | 102 | 103 | 104 |
| 105 | 106 | 107 | 108 | 109 | 110 | 111 | 112 |
| 113 | 114 | 115 | 116 | 117 | 118 | 119 | 120 |
| 121 | 122 | 123 | 124 | 125 | 126 | 127 | 128 |
| 129 | 130 | 131 | 132 | 133 | 134 | 135 | 136 |
| 137 | 138 | 139 | 140 | 141 | 142 | 143 | 144 |
| 145 | 146 | 147 | 148 | 149 | 150 | 151 | 152 |
| 153 | 154 | 155 | 156 | 157 | 158 | 159 | 160 |

FIG. 4

00013066.071000

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1ST INTERLEAVER OUTPUT WHEN $T_{II}=20\text{msec}$ (CODE RATE=1/3)

| | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|
| 1 | 3 | 5 | 7 | 9 | 11 | 13 | 15 |
| 17 | 19 | 21 | 23 | 25 | 27 | 29 | 31 |
| 33 | 35 | 37 | 39 | 41 | 43 | 45 | 47 |
| 49 | 51 | 53 | 55 | 57 | 59 | 61 | 63 |
| 65 | 67 | 69 | 71 | 73 | 75 | 77 | 79 |
| 81 | 83 | 85 | 87 | 89 | 91 | 93 | 95 |
| 97 | 99 | 101 | 103 | 105 | 107 | 109 | 111 |
| 113 | 115 | 117 | 119 | 121 | 123 | 125 | 127 |
| 129 | 131 | 133 | 135 | 137 | 139 | 141 | 143 |
| 145 | 147 | 149 | 151 | 153 | 155 | 157 | 159 |
| 2 | 4 | 6 | 8 | 10 | 12 | 14 | 16 |
| 18 | 20 | 22 | 24 | 26 | 28 | 30 | 32 |
| 34 | 36 | 38 | 40 | 42 | 44 | 46 | 48 |
| 50 | 52 | 54 | 56 | 58 | 60 | 62 | 64 |
| 66 | 68 | 70 | 72 | 74 | 76 | 78 | 80 |
| 82 | 84 | 86 | 88 | 90 | 92 | 94 | 96 |
| 98 | 100 | 102 | 104 | 106 | 108 | 110 | 112 |
| 114 | 116 | 118 | 120 | 122 | 124 | 126 | 128 |
| 130 | 132 | 134 | 136 | 138 | 140 | 142 | 144 |
| 146 | 148 | 150 | 152 | 154 | 156 | 158 | 160 |

FIG. 5A

000120" 8901960

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IST INTERLEAVER OUTPUT WHEN $T_{TI}=40\text{msec}$ (CODE RATE=1/3)

| | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|
| 1 | 5 | 9 | 13 | 17 | 21 | 25 | 29 |
| 33 | 37 | 41 | 45 | 49 | 53 | 57 | 61 |
| 65 | 69 | 73 | 77 | 81 | 85 | 89 | 93 |
| 97 | 101 | 105 | 109 | 113 | 117 | 121 | 125 |
| 129 | 133 | 137 | 141 | 145 | 149 | 153 | 157 |
| 3 | 7 | 11 | 15 | 19 | 23 | 27 | 31 |
| 35 | 39 | 43 | 47 | 51 | 55 | 59 | 63 |
| 67 | 71 | 75 | 79 | 83 | 87 | 91 | 95 |
| 99 | 103 | 107 | 111 | 115 | 119 | 123 | 127 |
| 131 | 135 | 139 | 143 | 147 | 151 | 155 | 159 |
| 2 | 6 | 10 | 14 | 18 | 22 | 26 | 30 |
| 34 | 38 | 42 | 46 | 50 | 54 | 58 | 62 |
| 66 | 70 | 74 | 78 | 82 | 86 | 90 | 94 |
| 98 | 102 | 106 | 110 | 114 | 118 | 122 | 126 |
| 130 | 134 | 138 | 142 | 146 | 150 | 154 | 158 |
| 4 | 8 | 12 | 16 | 20 | 24 | 28 | 32 |
| 36 | 40 | 44 | 48 | 52 | 56 | 60 | 64 |
| 68 | 72 | 76 | 80 | 84 | 88 | 92 | 96 |
| 100 | 104 | 108 | 112 | 116 | 120 | 124 | 128 |
| 132 | 136 | 140 | 144 | 148 | 152 | 156 | 160 |

FIG. 5B

000120" 890ET960

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1ST INTERLEAVER OUTPUT WHEN TTI=80mSEC(CODE RATE=1/3)

| | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|
| 1 | 9 | 17 | 25 | 33 | 41 | 49 | 57 |
| 65 | 73 | 81 | 89 | 97 | 105 | 113 | 121 |
| 129 | 137 | 145 | 153 | 5 | 13 | 21 | 29 |
| 37 | 45 | 53 | 61 | 69 | 77 | 85 | 93 |
| 101 | 109 | 117 | 125 | 133 | 141 | 149 | 157 |
| 3 | 11 | 19 | 27 | 35 | 43 | 51 | 59 |
| 67 | 75 | 83 | 91 | 99 | 107 | 115 | 123 |
| 131 | 139 | 147 | 155 | 7 | 15 | 23 | 31 |
| 39 | 47 | 55 | 63 | 71 | 79 | 87 | 95 |
| 103 | 111 | 119 | 127 | 135 | 143 | 151 | 159 |
| 2 | 10 | 18 | 26 | 34 | 42 | 50 | 58 |
| 66 | 74 | 82 | 90 | 98 | 106 | 114 | 122 |
| 130 | 138 | 146 | 154 | 6 | 14 | 22 | 30 |
| 38 | 46 | 54 | 62 | 70 | 78 | 86 | 94 |
| 102 | 110 | 118 | 126 | 134 | 142 | 150 | 158 |
| 4 | 12 | 20 | 28 | 36 | 44 | 52 | 60 |
| 68 | 76 | 84 | 92 | 100 | 108 | 116 | 124 |
| 132 | 140 | 148 | 156 | 8 | 16 | 24 | 32 |
| 40 | 48 | 56 | 64 | 72 | 80 | 88 | 96 |
| 104 | 112 | 120 | 128 | 136 | 144 | 152 | 160 |

FIG. 5C

09613068-071000

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| | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 |
| 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 |
| 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 |
| 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 |
| 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 |
| 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 |
| 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 |
| 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 |
| 97 | 98 | 99 | 100 | 101 | 102 | 103 | 104 |
| 105 | 106 | 107 | 108 | 109 | 110 | 111 | 112 |
| 113 | 114 | 115 | 116 | 117 | 118 | 119 | 120 |
| 121 | 122 | 123 | 124 | 125 | 126 | 127 | 128 |
| 129 | 130 | 131 | 132 | 133 | 134 | 135 | 136 |
| 137 | 138 | 139 | 140 | 141 | 142 | 143 | 144 |
| 145 | 146 | 147 | 148 | 149 | 150 | 151 | 152 |
| 153 | 154 | 155 | 156 | 157 | 158 | 159 | 160 |

FIG. 6

00013068.01000

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1ST INTERLEAVER OUTPUT WHEN $T_{PI}=20\text{msec}$ (CODE RATE $R=1/2$)

| | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|
| 1 | 3 | 5 | 7 | 9 | 11 | 13 | 15 |
| 17 | 19 | 21 | 23 | 25 | 27 | 29 | 31 |
| 33 | 35 | 37 | 39 | 41 | 43 | 45 | 47 |
| 49 | 51 | 53 | 55 | 57 | 59 | 61 | 63 |
| 65 | 67 | 69 | 71 | 73 | 75 | 77 | 79 |
| 81 | 83 | 85 | 87 | 89 | 91 | 93 | 95 |
| 97 | 99 | 101 | 103 | 105 | 107 | 109 | 111 |
| 113 | 115 | 117 | 119 | 121 | 123 | 125 | 127 |
| 129 | 131 | 133 | 135 | 137 | 139 | 141 | 143 |
| 145 | 147 | 149 | 151 | 153 | 155 | 157 | 159 |
| 2 | 4 | 6 | 8 | 10 | 12 | 14 | 16 |
| 18 | 20 | 22 | 24 | 26 | 28 | 30 | 32 |
| 34 | 36 | 38 | 40 | 42 | 44 | 46 | 48 |
| 50 | 52 | 54 | 56 | 58 | 60 | 62 | 64 |
| 66 | 68 | 70 | 72 | 74 | 76 | 78 | 80 |
| 82 | 84 | 86 | 88 | 90 | 92 | 94 | 96 |
| 98 | 100 | 102 | 104 | 106 | 108 | 110 | 112 |
| 114 | 116 | 118 | 120 | 122 | 124 | 126 | 128 |
| 130 | 132 | 134 | 136 | 138 | 140 | 142 | 144 |
| 146 | 148 | 150 | 152 | 154 | 156 | 158 | 160 |

FIG. 7A

000120" 29051960

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1ST INTERLEAVER OUTPUT WHEN $T_{TI}=40\text{msec}$ (CODE RATE $R=1/2$)

| | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|
| 1 | 5 | 9 | 13 | 17 | 21 | 25 | 29 |
| 33 | 37 | 41 | 45 | 49 | 53 | 57 | 61 |
| 65 | 69 | 73 | 77 | 81 | 85 | 89 | 93 |
| 97 | 101 | 105 | 109 | 113 | 117 | 121 | 125 |
| 129 | 133 | 137 | 141 | 145 | 149 | 153 | 157 |
| 3 | 7 | 11 | 15 | 19 | 23 | 27 | 31 |
| 35 | 39 | 43 | 47 | 51 | 55 | 59 | 63 |
| 67 | 71 | 75 | 79 | 83 | 87 | 91 | 95 |
| 99 | 103 | 107 | 111 | 115 | 119 | 123 | 127 |
| 131 | 135 | 139 | 143 | 147 | 151 | 155 | 159 |
| 2 | 6 | 10 | 14 | 18 | 22 | 26 | 30 |
| 34 | 38 | 42 | 46 | 50 | 54 | 58 | 62 |
| 66 | 70 | 74 | 78 | 82 | 86 | 90 | 94 |
| 98 | 102 | 106 | 110 | 114 | 118 | 122 | 126 |
| 130 | 134 | 138 | 142 | 146 | 150 | 154 | 158 |
| 4 | 8 | 12 | 16 | 20 | 24 | 28 | 32 |
| 36 | 40 | 44 | 48 | 52 | 56 | 60 | 64 |
| 68 | 72 | 76 | 80 | 84 | 88 | 92 | 96 |
| 100 | 104 | 108 | 112 | 116 | 120 | 124 | 128 |
| 132 | 136 | 140 | 144 | 148 | 152 | 156 | 160 |

FIG. 7B

00013068-071000

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1ST INTERLEAVER OUTPUT WHEN TTI=80msec (CODE RATE R=1/2)

| | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|
| 1 | 9 | 17 | 25 | 33 | 41 | 49 | 57 |
| 65 | 73 | 81 | 89 | 97 | 105 | 113 | 121 |
| 129 | 137 | 145 | 153 | 5 | 13 | 21 | 29 |
| 37 | 45 | 53 | 61 | 69 | 77 | 85 | 93 |
| 101 | 109 | 117 | 125 | 133 | 141 | 149 | 157 |
| 3 | 11 | 19 | 27 | 35 | 43 | 51 | 59 |
| 67 | 75 | 83 | 91 | 99 | 107 | 115 | 123 |
| 131 | 139 | 147 | 155 | 7 | 15 | 23 | 31 |
| 39 | 47 | 55 | 63 | 71 | 79 | 87 | 95 |
| 103 | 111 | 119 | 127 | 135 | 143 | 151 | 159 |
| 2 | 10 | 18 | 26 | 34 | 42 | 50 | 58 |
| 66 | 74 | 82 | 90 | 98 | 106 | 114 | 122 |
| 130 | 138 | 146 | 154 | 6 | 14 | 22 | 30 |
| 38 | 46 | 54 | 62 | 70 | 78 | 86 | 94 |
| 102 | 110 | 118 | 126 | 134 | 142 | 150 | 158 |
| 4 | 12 | 20 | 28 | 36 | 44 | 52 | 60 |
| 68 | 76 | 84 | 92 | 100 | 108 | 116 | 124 |
| 132 | 140 | 148 | 156 | 8 | 16 | 24 | 32 |
| 40 | 48 | 56 | 64 | 72 | 80 | 88 | 96 |
| 104 | 112 | 120 | 128 | 136 | 144 | 152 | 160 |

FIG. 7C

000T20" 880ET960

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$T\pi = 10\text{msec}$

RF

| |
|-----|
| x |
| y |
| z |
| x |
| y |
| z |
| ... |

FIG. 8A

$T\pi = 20\text{msec}$

RF1

RF2

| | |
|-----|-----|
| x | y |
| z | x |
| y | z |
| x | y |
| z | x |
| y | z |
| ... | ... |

FIG. 8B

000720" 0905T950

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$T_{\Pi} = 40\text{msec}$

| RF1 | RF2 | RF3 | RF4 |
|-----|-----|-----|-----|
| x | z | y | x |
| y | x | z | y |
| z | y | x | z |
| x | z | y | x |
| y | x | z | y |
| z | y | x | z |
| ⋮ | ⋮ | ⋮ | ⋮ |

FIG. 8C

$T_{\Pi} = 80\text{msec}$

| RF1 | RF2 | RF3 | RF4 | RF5 | RF6 | RF7 | RF8 |
|-----|-----|-----|-----|-----|-----|-----|-----|
| x | y | z | x | y | z | x | y |
| z | x | y | z | x | y | z | x |
| y | z | x | y | z | x | y | z |
| x | y | z | x | y | z | x | y |
| z | x | y | z | x | y | z | x |
| y | z | x | y | z | x | y | z |
| ⋮ | ⋮ | ⋮ | ⋮ | ⋮ | ⋮ | ⋮ | ⋮ |

FIG. 8D

00013068-071000

1ST INTERLEAVER INPUT WHEN $T_{II} = 80\text{msec}$

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| x | y | z | x | y | z | x | y |
| z | x | y | z | x | y | z | x |
| y | z | x | y | z | x | y | z |
| x | y | z | x | y | z | x | y |
| z | x | y | z | | | | |

FIG. 9A

1ST INTERLEAVER OUTPUT

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| x | y | z | x | y | z | x | y |
| z | x | y | z | x | y | z | x |
| y | z | x | y | z | x | y | z |
| x | y | z | x | y | z | x | y |
| z | | y | | x | | z | |

FIG. 9B

09613068-071000

RADIO FRAME SEGMENTER OUTPUT (WITH FILLER BITS INSERTED)

| RF1 | RF2 | RF3 | RF4 | RF5 | RF6 | RF7 | RF8 |
|-----|-----|-----|-----|-----|-----|-----|-----|
| x | y | y | z | z | y | z | y |
| z | x | x | y | y | x | y | x |
| y | z | z | x | x | z | x | z |
| x | y | y | y | z | x | z | y |
| z | z | x | x | 0 | 0 | 0 | 0 |

FIG. 9C

00013068 071000

1ST INTERLEAVER INPUT WHEN $T_I = 40\text{msec}$

| | | | |
|---|---|---|---|
| x | y | z | x |
| y | z | x | y |
| z | x | y | z |
| x | y | z | x |
| y | z | x | y |
| z | | | |

FIG. 10A

1ST INTERLEAVER OUTPUT

| | | | |
|---|---|---|---|
| x | z | y | x |
| y | x | z | y |
| z | y | x | z |
| x | z | y | x |
| y | x | z | y |
| z | | | |

FIG. 10B

00013063.071000

RADIO FREAME SEGMENTER OUTPUT (WITH FILLER BITS INSERTED)

| RF1 | RF2 | RF3 | RF4 |
|-----|-----|-----|-----|
| x | z | y | x |
| y | x | z | y |
| z | y | x | z |
| x | z | y | x |
| y | x | z | y |
| z | 0 | 0 | 0 |

FIG. 10C

1ST INTERLEAVER INPUT WHEN $T_I = 80\text{msec}$

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| x | y | z | x | y | z | x | y |
| z | x | y | z | x | y | z | x |
| y | z | x | y | z | x | y | z |
| x | y | z | x | y | z | x | y |
| z | x | y | z | | | | |

FIG. 11A

1ST INTERLEAVER OUTPUT

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| x | y | z | x | y | z | x | y |
| z | x | y | z | x | y | z | x |
| y | z | x | y | z | x | y | z |
| x | y | z | x | y | z | x | y |
| z | | y | | x | | z | |

FIG. 11B

00013068-071000

FIRST INTERLEAVER OUTPUT (WITH FILLER BITS INSERTED)

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| x | y | z | x | y | z | x | y |
| z | x | y | z | x | y | z | x |
| y | z | x | y | z | x | y | z |
| x | y | z | x | y | z | x | y |
| z | 0 | y | 0 | x | 0 | z | 0 |

FIG. 11C

RADIO FRAME SEGMENTER OUTPUT

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| x | y | z | x | y | z | x | y |
| z | x | y | z | x | y | z | x |
| y | z | x | y | z | x | y | z |
| x | y | z | x | y | z | x | y |
| z | 0 | y | 0 | x | 0 | z | 0 |

FIG. 11D

09613068-071000

1ST INTERLEAVER INPUT WHEN TTI = 80msec

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| x | y | z | x | y | z | x | y |
| z | x | y | z | x | y | z | x |
| y | z | x | y | z | x | y | z |
| x | y | z | x | y | z | x | y |
| z | x | y | z | | | | |

FIG. 12A

1ST INTERLEAVER OUTPUT

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| x | y | z | x | y | z | x | y |
| z | x | y | z | x | y | z | x |
| y | z | x | y | z | x | y | z |
| x | y | z | x | y | z | x | y |
| z | | y | | x | | z | |

FIG. 12B

09613058-071000

RADIO FRAME SEGMENTER OUTPUT

| RF1 | RF2 | RF3 | RF4 | RF5 | RF6 | RF7 | RF8 |
|-----|-----|-----|-----|-----|-----|-----|-----|
| x | y | z | x | y | z | x | y |
| z | x | y | z | x | y | z | x |
| y | z | x | y | z | x | y | z |
| x | y | z | x | y | z | x | y |
| z | 0 | y | 0 | x | 0 | z | 0 |

FIG. 12C

00013068-071000

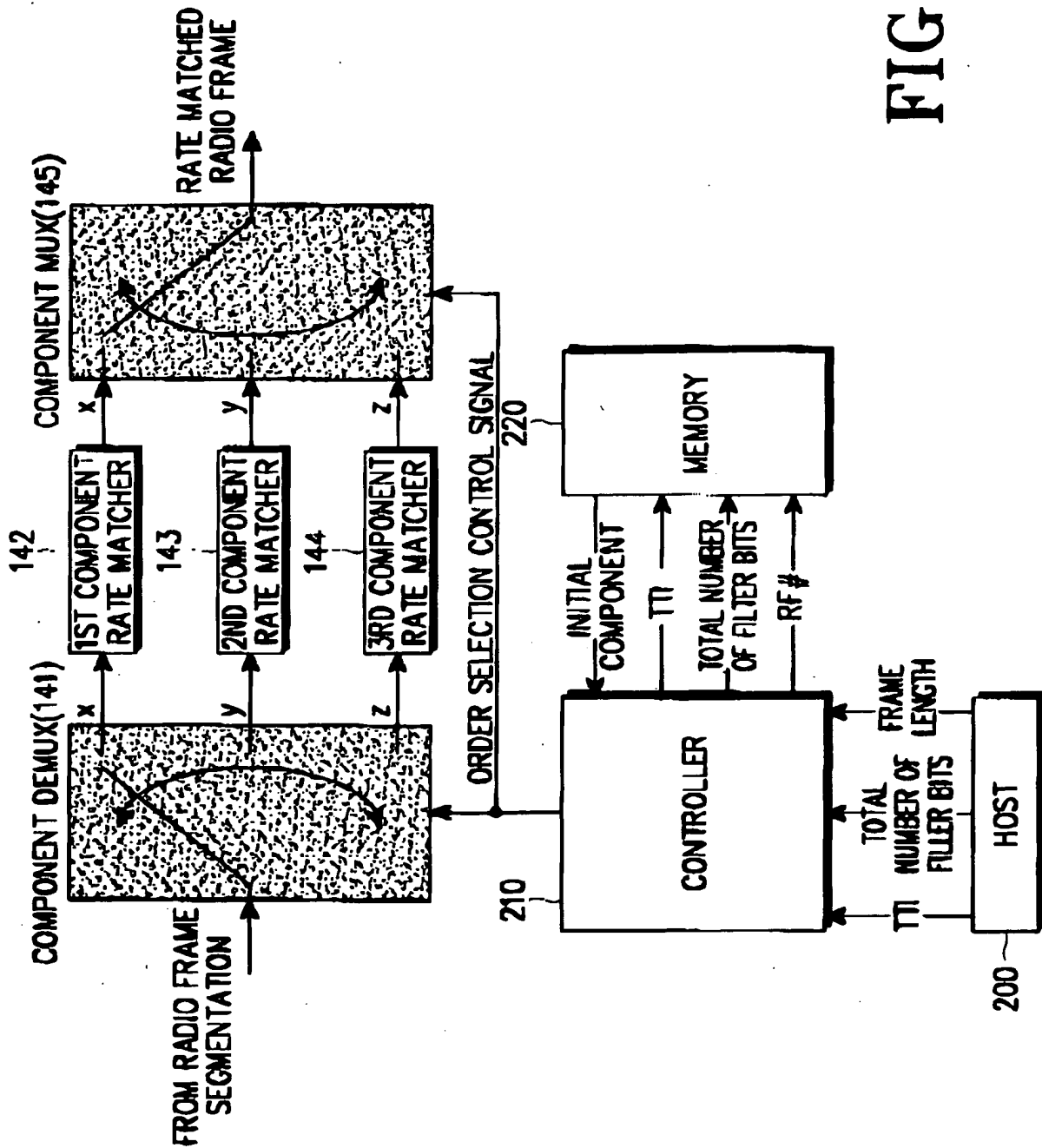


FIG. 13

000120" 290ET960

000140" S90ET960

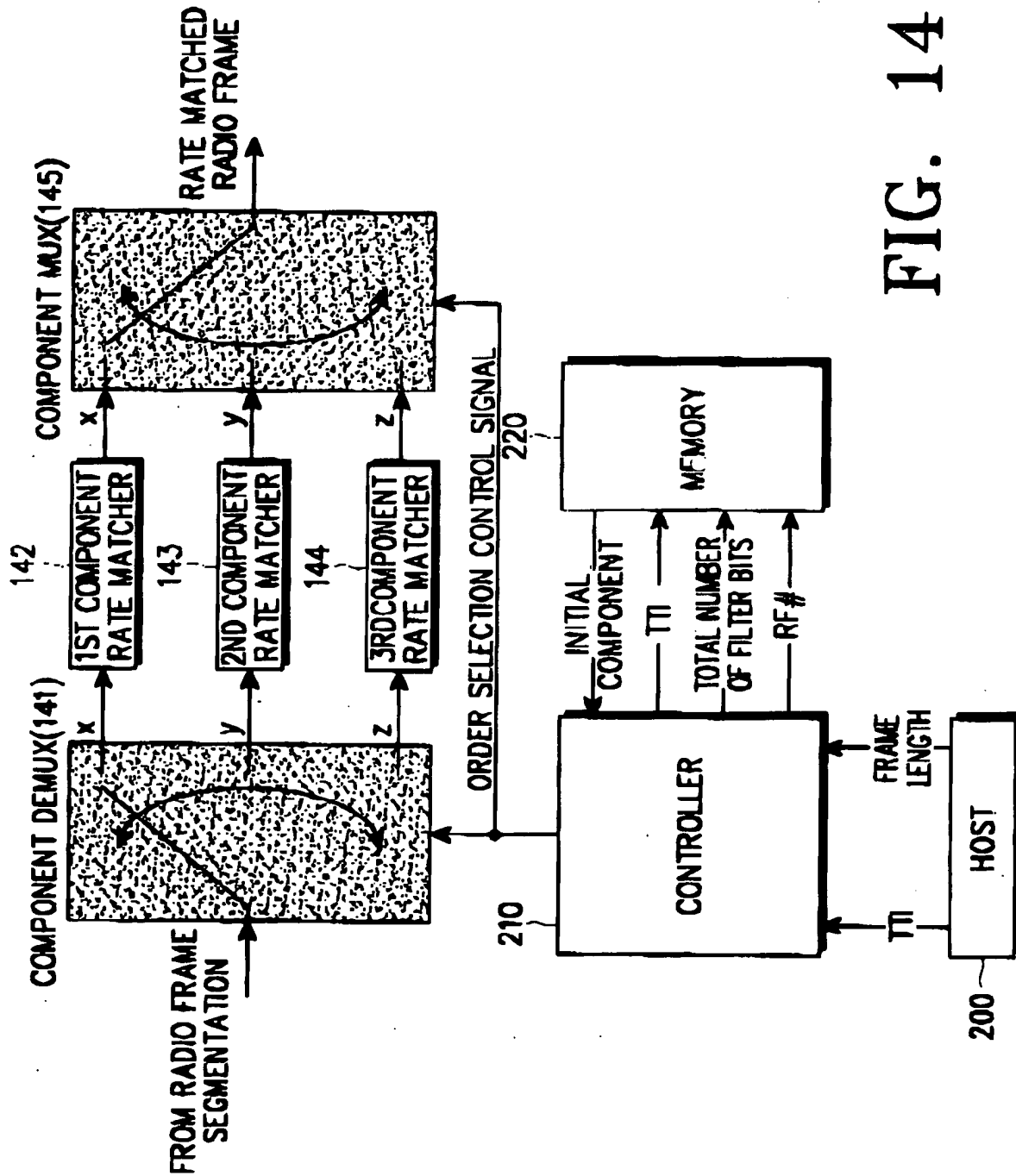


FIG. 14

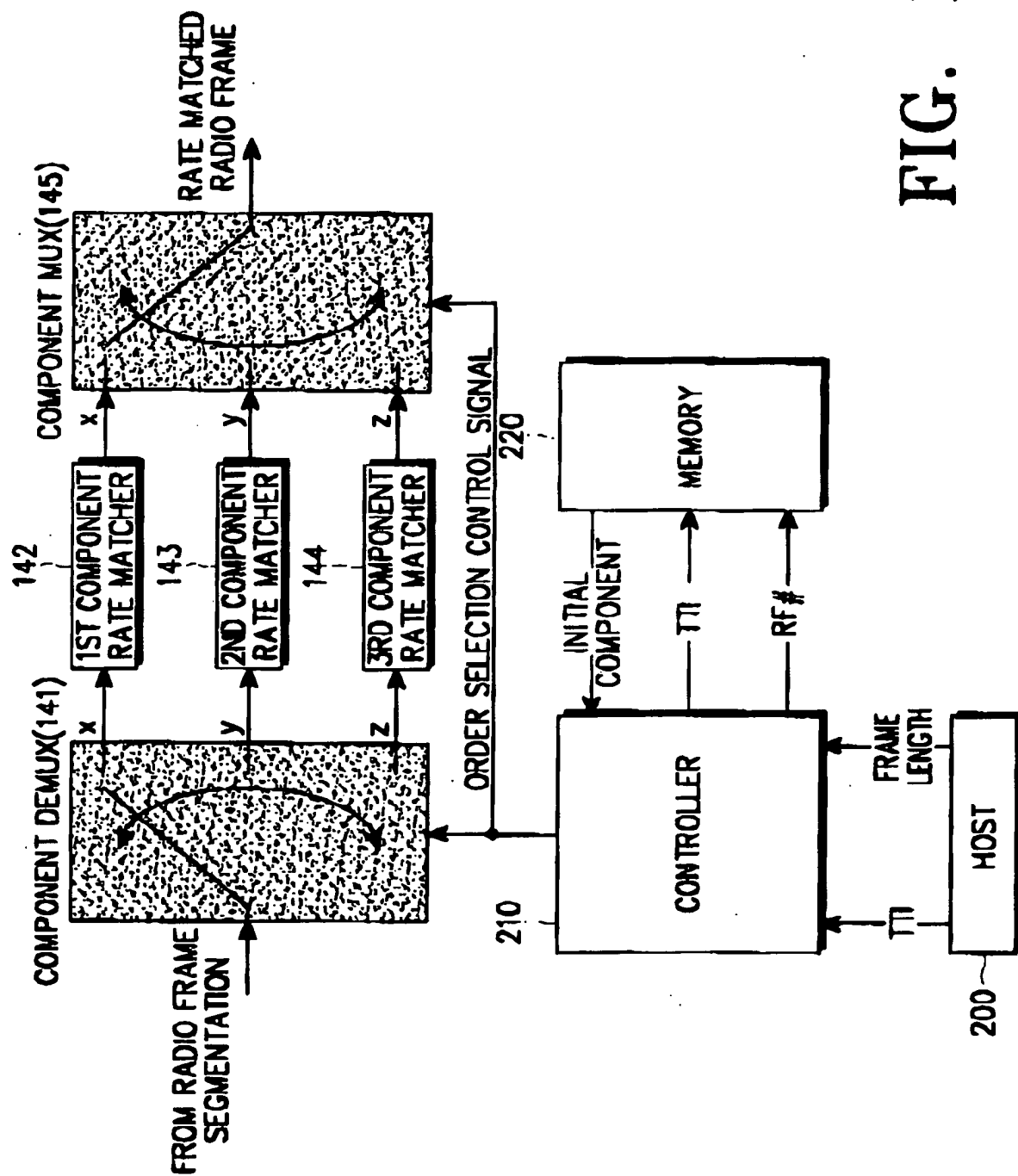


FIG. 15